

*AMENDMENTS TO THE CLAIMS*

This listing of claims replaces all prior versions, and listings, of claims in the application.

1.-4. (Canceled)

5. (Currently Amended) A method for enhancing an immune response in a subject, comprising

a) isolating a population of cells comprising one or more of a mature B cell and a B cell progenitor from the subject;

a) b) contacting a the population of cells comprising one or more of a mature B cell and a B cell progenitor with a composition comprising IL-21 polypeptide or an agonist thereof, wherein the IL-21 polypeptide comprises the amino acid sequence of SEQ ID NO: 1 and the agonist retains the ability to bind to the IL-21 receptor and produce a physiological effect produced by binding of the IL-21 polypeptide comprising the amino acid sequence of SEQ ID NO: 1 to the IL-21 receptor, and wherein the population of cells optionally is contacted with at least one composition comprising an antigen, thereby inducing differentiation of at least one of the mature B cell and the B cell progenitor into one or more of a memory B cell and a plasma cell;

b) c) isolating or purifying one or more of the memory B cell and the plasma cell; and

e) d) introducing at least one of the memory B cell and the plasma cell into the subject, thereby enhancing the immune response.

6. (Canceled)

7. (Canceled)

8. (Withdrawn) The method of claim 5, wherein the subject is a human subject.

9. (Canceled)

10. (Currently Amended) The method of claim 5 9, further comprising contacting wherein the population of cells is contacted with at least one composition comprising an antigen.

11. (Original) The method of claim 10, wherein the antigen comprises a viral antigen, a bacterial antigen, or an antigen from a parasite.

12. (Currently Amended) The method of claim 5 9, wherein the B cell progenitor is an immature B cell.

13.-17. (Canceled)

18. (Currently Amended) A method for treating a subject with a condition comprising a specific deficiency of at least one of memory B cells and plasma cells, comprising

~~The method of claim 13, comprising administering the IL-21 or agonist thereof by~~

a) isolating a population of cells comprising one or more of a mature B cell and a B cell progenitor from the subject;

a) b) treating a contacting the population of cells comprising at least one of a mature B cell and a B cell progenitor ex vivo with a composition comprising IL-21 polypeptide or an agonist thereof, wherein the IL-21 polypeptide comprises the amino acid sequence of SEQ ID NO: 1 and the agonist retains the ability to bind to the IL-21 receptor and produce a physiological effect produced by binding of the IL-21 polypeptide to the IL-21 receptor, and wherein the population of cells optionally is contacted with at least one composition comprising an antigen, thereby inducing differentiation of at least one B cell into one or more of a memory B cell and a plasma cell;

b) c) isolating the memory B cell, the plasma cell, or both; and

e) d) introducing at least one of the memory B cell and the plasma cell into the subject.

19. (Canceled)

20. (Currently Amended) The method of claim 18 13, wherein the subject is a human subject.

21.-31. (Canceled)

32. (New) The method of claim 1, wherein the composition comprises the IL-21 polypeptide comprising the amino acid sequence of SEQ ID NO: 1.

33. (New) The method of claim 18, wherein the composition comprises the IL-21 polypeptide comprising the amino acid sequence of SEQ ID NO: 1.

32. (New) The method of claim 1, wherein the composition comprises an agonist of the IL-21 polypeptide that is a variant of the amino acid sequence of SEQ ID NO: 1, wherein 1-5 amino acids of SEQ ID NO: 1 have been substituted, deleted, or added.

33. (New) The method of claim 18, wherein the composition comprises an agonist of the IL-21 polypeptide that is a variant of the amino acid sequence of SEQ ID NO: 1, wherein 1-5 amino acids of SEQ ID NO: 1 have been substituted, deleted, or added.